Cynomolgus IL13RA1 / IL-13RA1 Protein (His Tag)

Catalog Number: 90864-C08H

General Information

Gene Name Synonym:

IL13Ra1

Protein Construction:

A DNA sequence encoding the cynomolgus IL13RA1 (XP_005594500.1) (Met1-Thr341) was expressed with a polyhistidine tag at the C-terminus.

Source: Cynomolgus

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE.

Bio Activity:

Immobilized Recombinant Human IL13 Protein (Fc Tag)(Cat:10369-H01H) at 2μg/mL (100μL/well) can bind Recombinant Cynomolgus IL13RA1 / IL-13RA1 Protein (His Tag)(Cat:90864-C08H), the EC_{50} is 90-380 ng/mL.

Endotoxin:

< 1.0 EU per μg protein as determined by the LAL method.

Predicted N terminal: Ala 25

Molecular Mass:

The recombinant cynomolgus IL13RA1 consists of 328 amino acids and predicts a molecular mass of 37.9 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

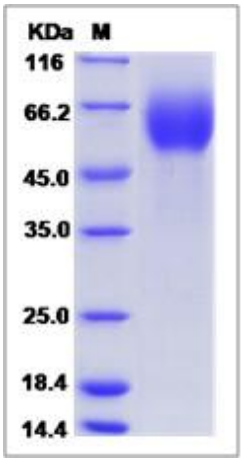
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Interleukin 13 receptor, alpha 1, also known as IL13RA1/IL-13RA1 and CD213A1 (cluster of differentiation 213A1), is a subunit of the interleukin 13 receptor. This subunit forms a receptor complex with IL4 receptor alpha, a subunit shared by IL13 and IL4 receptors. IL13RA1/IL-13RA1 serves as a primary IL13-binding subunit of the IL13 receptor, and may also be a component of IL4 receptors. This protein has been shown to bind tyrosine kinase TYK2 and thus may mediate the signaling processes that lead to the activation of JAK1, STAT3, and STAT6 induced by IL13 and IL4. IL13RA1/IL-13RA1 binds with low affinity to interleukin-13 (IL13). This subunit together with IL4RA can form a functional receptor for IL13. IL13RA1/IL-13RA1 also serves as an alternate accessory protein to the common cytokine receptor gamma chain for interleukin-4 (IL4) signaling, but cannot replace the function of IL2RG in allowing enhanced interleukin-2 (IL2) binding activity.

References

1.Kawakami M, *et al*. (2002) Mutation and functional analysis of IL-13 receptors in human malignant glioma cells. Oncol Res. 12 (11-12): 459-67. 2.Umeshita-Suyama R, *et al*. (2000) Characterization of IL-4 and IL-13 signals dependent on the human IL-13 receptor alpha chain 1: redundancy of requirement of tyrosine residue for STAT3 activation. Int Immunol. 12 (11): 1499-509. 3.He JQ, *et al*. (2003) Polymorphisms in the IL13, IL13RA1, and IL4RA genes and rate of decline in lung function in smokers. Am J Respir. Cell Mol Biol. 28 (3): 379-85.